

Y3, N21/5: 13/258

NATIONAL ADVISORY COMMITTEE
FOR AERONAUTICS

1724 F Street, Northwest
Washington 25, D. C.

M.L. 258

September 30, 1948

The following documents were released by the National Advisory Committee for Aeronautics during the month of September.

TECHNICAL NOTES

No.

- TN 1499 The Inward Bulge Type Buckling of Monocoque Cylinders. IV - Experimental Investigation of Cylinders Subjected to Pure Bending.
By: N. J. Hoff, Bruno A. Boley, and S. V. Nardo.
- TN 1503 Bearing Strengths of Some Aluminum-Alloy Rolled and Extruded Sections.
By: R. L. Moore.
- TN 1505 The Inward Bulge Type Buckling of Monocoque Cylinders. V - Revised Strain Energy Theory Which Assumes a More General Deflected Shape at Buckling.
By: N. J. Hoff, Bertram Klein, and Bruno A. Boley.
- TN 1514 Fatigue of Gusseted Joints.
By: Howard H. Langdon and Bernard Fried.
- TN 1532 A Metallurgical Investigation of Two Contour-Forged Gas-Turbine Discs of 19-9DL Alloy.
By: J. W. Freeman, E. E. Reynolds, and A. E. White.
- TN 1533 A Metallurgical Investigation of Two Large Discs of CSA Alloy.
By: E. E. Reynolds, J. W. Freeman, and A. E. White.
- TN 1546 Aerodynamic Characteristics of 24 NACA 16-Series Airfoils at Mach Numbers between 0.3 and 0.8.
By: W. F. Lindsey, D. B. Stevenson, and Bernard N. Daley.
- TN 1571 Effect of Afterbody Length and Keel Angle on Minimum Depth of Step for Landing Stability and on Take-Off Stability of a Flying Boat.
By: Roland E. Olson and Norman S. Land.
- TN 1668 Investigation of Effects of Geometric Dihedral on Low-Speed Static Stability and Yawing Characteristics of an Untapered 45° Sweptback-Wing Model of Aspect Ratio 2.61.
By: M. J. Queijo and Byron M. Jaquet.

- TN 1677 Experimental and Calculated Characteristics of Several High-Aspect-Ratio Tapered Wings Incorporating NACA 44-Series, 230-Series, and Low-Drag 64-Series Airfoil Sections.
By: Thomas V. Bollech.
- TN 1684 A Preliminary Evaluation of the Use of Ground Radar for the Avoidance of Turbulent Clouds.
By: H. Press and E. T. Binckley.
- TN 1685 Linearized Supersonic Theory of Conical Wings.
By: P. A. Lagerstrom.
- TN 1686 Effect of Length-Beam Ratio on Aerodynamic Characteristics of Flying-Boat Hulls without Wing Interference.
By: John G. Lowry and John M. Riebe.
- TN 1689 Load Distributions Due to Steady Roll and Pitch for Thin Wings at Supersonic Speeds.
By: W. E. Moeckel and J. C. Evvard.
- TN 1690 Theoretical and Experimental Wing-Tip Accelerations of a Small Flying Boat during Landing Impacts.
By: Daniel Savitsky.
- TN 1692 Determination of Bending Moments in Pressure-Loaded Rings of Arbitrary Shape When Deflections Are Considered.
By: F. R. Steinbacher and Hsu Lo.
- TN 1695 Effect of Pressure Recovery on the Performance of a Jet-Propelled Airplane.
By: Frederick H. Hanson, Jr. and Emmet A. Mossman.
- TN 1699 A Linearized Solution for Time-Dependent Velocity Potentials near Three-Dimensional Wings at Supersonic Speeds.
By: John C. Evvard.
- TN 1700 The Rolling Moment Due to Sideslip of Triangular, Trapezoidal, and Related Plan Forms in Supersonic Flow.
By: Arthur L. Jones, John R. Spreiter, and Alberta Alksne.
- TN 1701 Analysis of the Performance of a Jet Engine from Characteristics of the Components. II - Interaction of the Components as Determined from Engine Operation.
By: Arthur W. Goldstein, Sumner Alpert, William Beede, and Karl Kovach.
- TN 1702 Analytical and Experimental Performance of an Explosion-Cycle Combustion Chamber for a Jet-Propulsion Engine.
By: Morris A. Zipkin and George W. Lewis, Jr.

- TN 1705 Experimental Investigation of the Effects of Plastic Flow in a Tension Panel with a Circular Hole.
By: George E. Griffith.
- TN 1707 Effect of Reynolds Number in the Turbulent-Flow Range on Flame Speeds of Bunsen-Burner Flames.
By: Lowell M. Bollinger and David T. Williams.
- TN 1708 Theoretical Characteristics in Supersonic Flow of Constant-Chord Partial-Span Control Surfaces on Rectangular Wings Having Finite Thickness.
By: Warren A. Tucker and Robert L. Nelson.
- TN 1710 Minimum-Weight Design of Simply Supported Transversely Stiffened Plates under Compression.
By: Alexander Gomza and Paul Seide.
- TN 1712 Analytical Method of Determining Transmission of Particles and Radiation through Great Thickness of Matter.
By: A. R. Bobrowsky.
- TN 1713 Experimental Study of Effect of Vaneless-Diffuser Diameter on Diffuser Performance.
By: Guy R. Bradshaw and Eugene B. Laskin.
- TN 1718 Influence of Leading-Edge Suction on Lift-Drag Ratios of Wings at Supersonic Speeds.
By: Clarence B. Cohen.

TECHNICAL MEMORANDUMS

- TM 1182 The Problem of Torsion in Prismatic Members of Circular Segmental Cross Section.
By: A. Weigand.

REPORTS

Libraries in most of the important cities throughout the country, as well as libraries of schools, manufacturers, and other organizations dealing with aeronautics, are supplied with Reports for reference.

- No. 804 Air-Consumption Parameters for Automatic Mixture Control of Aircraft Engines.
By: Sidney J. Shames.
- No. 805 An Analysis of Life Expectancy of Airplane Wings in Normal Cruising Flight.
By: Abbott A. Putnam.



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REPORTS

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- No. 807 A Method of Analysis of V-G Records from Transport Operations.
By: A. M. Peiser and M. Wilkerson.
- No. 809 Principles of Moment Distribution Applied to Stability of Structures Composed of Bars or Plates.
By: Eugene E. Lundquist, Elbridge Z. Stowell, and Evan H. Schuette.
- No. 810 Analysis and Modification of Theory for Impact of Seaplanes on Water.
By: Wilbur L. Mayo.
- No. 813 Correlation of Exhaust-Valve Temperatures with Engine Operating Conditions and Valve Design in an Air-Cooled Cylinder.
By: M. A. Zipkin and J. C. Sanders.
- No. 815 Method of Matching Performance of Compressor Systems with That of Aircraft Power Sections.
By: Robert O. Bullock, Robert C. Keetch, and Jason J. Moses.
- No. 817 Nitrided-Steel Piston Rings for Engines of High Specific Power.
By: John H. Collins, Jr., Edmond E. Bisson, and Ralph F. Schmiedlin.
- No. 818 An Experimental Investigation of Rectangular Exhaust-Gas Ejectors Applicable for Engine Cooling.
By: Eugene J. Manganiello and Donald Bogatsky.
- No. 819 Formulas for Propellers in Yaw and Charts of the Side-Force Derivative.
By: Herbert S. Ribner.
- No. 821 Effect of NACA Injection Impeller on Mixture Distribution of Double-Row Radial Aircraft Engine.
By: Frank E. Marble, William K. Ritter, and Mahlon A. Miller.
- No. 822 Calculations of Economy of 18-Cylinder Radial Aircraft Engine with Exhaust-Gas Turbine Geared to the Crankshaft.
By: Richard W. Hannum and Richard H. Zimmerman.